



## Chapter 1: Boat Crew Duties and Responsibilities



### **Overview**

### Introduction

### NOTE &

More specific information for Auxiliary boat crews may be found in COMDTINST M16798.3 (series) Auxiliary Operations Policy Manual. Coast Guard and Auxiliary boat crews perform duties requiring both skill and knowledge. This chapter discusses general crew duties and related procedures for watchstanding necessary for the successful completion of Coast Guard missions. The general duties for crew members are outlined in this chapter. Assignments and procedures for specific tasks, such as towing or retrieving people from the water, are found in other chapters.

### In this chapter

This chapter is divided into three sections.

Section	Title	See Page
A	The Boat Crew	1-3
В	Boat Crew Duties	1-5
С	Watchstanding Responsibilities	1-13
Appendix 1-A	Pre-Underway Checklist	1-27
Appendix 1-B	Normal Cruising Checklist	1-31
Appendix 1-C	Auxiliary Pre-Underway Checklist	1-33

### Coast Guard Boat Crew Seamanship Manual





### Section A. The Boat Crew

### **Overview**

#### A.1. Introduction

There are three basic boat crew positions on Coast Guard boats:

- Coxswain
- Engineer (the Auxiliary program does not have a boat engineer position)
- Crew member

### A.2. Determining crew size

There are several factors in determining crew size:

- Boat type
- Operational need
- Minimum crew size prescribed by higher authority

### A.3. Minimum crew size

Commandant sets minimum crew sizes for standard boats. For example, the 47' motor life boat (MLB) carries a minimum crew of four -- a coxswain, an engineer, and two crew members. Area and District Commanders set minimum crew sizes for non-standard boats assigned to their units. Coast Guard boats and Auxiliary facilities may carry two to six people as crew. Many times, only a coxswain and a crew member comprise the crew for a nonstandard boat, Auxiliary facility, or for a cutter's boat.



### A.4. Qualification and certification

Boat crew members, engineers, and coxswains are qualified and certified in accordance with the <u>Boat Crew Training Manual</u>, COMDTINST M16114.9 (series). Qualification as a boat crew member is a prerequisite to qualification as boat engineer, coxswain, and surfman. Coast Guard Auxiliarists may qualify and certify for crew member and engineer in the same way. Auxiliarists are not permitted to be certified as coxswain on Coast Guard boats. Auxiliarists qualifications for crewing Auxiliary facilities are covered in the *Auxiliary Boat Crew Training and Qualification Guide - Crewman and Coxswain*, COMDTINST M16798.28 (series).

### A.5. The Auxiliary

An Auxiliarist on official orders may perform many Coast Guard duties, including boat crew member and boat engineer, but is not a military member of the Coast Guard. Although trained and qualified to an equivalent level, the Auxiliary member may not be assigned any authority or responsibility specifically reserved by regulation for military or law enforcement personnel.

### A.5.a. Auxiliary crew members

Since the coxswain of an Auxiliary facility is responsible for assigning (and often selecting) their crew members to duty, the controlling Coast Guard unit may not know the identity of all crew members. Therefore, the names of all crew members (including crew trainees) must be passed to the controlling unit by land line or other method immediately before the facility's departure to be sure an accurate accounting is on record.

For further guidance, refer to *Auxiliary Operations Manual*, COMDTINST M16798.3 (series) and directives issued by the District Director of Auxiliary.



### Section B. Boat Crew Duties

### **Overview**

#### Introduction

The Coast Guard and Auxiliary boat crew training programs are based on the concept that sailors must be trained at sea. This manual, and specifically this chapter, is designed to provide an outline of the **duties** typically performed by various members of boat crews and the skills and knowledge required to perform tasks assigned. For people seeking to be members of a boat crew, it is fundamental that they understand these duties and the importance of crew members working together as a team.

#### In this section

These items are discussed in this section:

Topic	See Page
Trainee	1-6
Crew Member	1-7
Boat Engineer	1-9
Coxswain	1-10
Surfman	1-12



### **Trainee**

### **B.1.** General

A trainee can be either a Coast Guard Active Duty, Auxiliarist (referred to as Candidate), or Reservist who qualifies as a boat crew member. The trainee rides on board to <u>only</u> observe actual operational missions, not as a member of the crew counted towards minimum crew requirements.

# B.2. Performance, skill, and knowledge requirements

The duties of a trainee are to learn and safely perform the practical tasks prescribed for crew members. These duties are in the qualification manuals and are performed under the supervision of a qualified crew member assigned to the boat.



### **Crew Member**

#### **B.3.** General

**Crew members** safely perform their duties under the supervision of a coxswain. They stand:

NOTE &

Refer to the Coast Guard Addendum to the National SAR Manual, COMDTINST M16130.2 (series) for policy on swimmers.) The Auxiliary does not have surface swimmers.

- helm,
- lookout,
- towing watches, and
- anchor watch.

### They also:

- rig towing and mooring lines,
- act as the surface swimmer,
- administer first aid, and
- operate damage control equipment.

This position provides valuable training for future duties and responsibilities.

### B.4. Performance, skill, and knowledge requirements

To be effective, boat crew members must execute orders quickly and must have the following knowledge and performance skills:

- Marlinespike seamanship and line handling
- Basic navigation (including radar) and boat handling
- Survival, safety, and damage control equipment
- Emergency and casualty control
- Watchstanding and communications
- First aid
- Preventive maintenance procedures for the boat in port



### B.4.a. Risk management

A keen knowledge of the boat's characteristics and limitations, the outfit equipment, and the stowage will be invaluable in times of crisis. Frequent drills practicing the procedures for different emergency circumstances will teach crew members how to react correctly to each situation. All crew members must continuously think about emergency situations and answer the hypothetical question, "What should I do if...?" so that it can be instantly put into action when the question becomes, "What do I do now?"

### B.4.b. Knowing the operating area

Boat crew members must have knowledge of their local Operating Area (OPAREA), also called Area of Responsibility (AOR).



### **Boat Engineer**

#### **B.5.** General

NOTE &

There is no engineer position in the Auxiliary program.

**Boat engineers** are responsible for propulsion and auxiliary machinery while underway. They also have other responsibilities:

- Boat crew member duties
- Preventive and corrective maintenance performed on the boat in port

B.6. Performance, skill, and knowledge requirements The skill and knowledge requirements for boat engineers are as extensive as those for coxswains. They must be able to take quick and proper action when faced with any boat engineering casualty. In addition to basic crew member skills, the following required knowledge and performance skills are necessary:

- Demonstrate complete knowledge of general engineering specifications and functional performance characteristics.
- Perform pre-start, light off, and securing functions for propulsion machinery.
- Monitor, detect, and respond to machinery and electrical system casualties or failures.
- Operate auxiliary machinery and systems, e.g., pumps, eductors, tillers, etc.
- Use on board damage control equipment to minimize damage from fire, grounding, or collision.



### Coxswain

#### B.7. General

Coast Guard boats underway must have a **coxswain** on board who is certified by the unit commander to operate that particular type of boat. The district director of Auxiliary certifies Auxiliary coxswains to operate an Auxiliary facility. Coxswains are in charge of the boat and crew. The coxswain's duty is unique. The coxswain's range and degree of responsibility are comparable to that of a cutter's deck watch officer. The Coast Guard places great trust in the coxswain's ability to provide effective boat crew leadership, coordination, and risk management skills. (For more information on risk management, see Chapter 4 - *Team Coordination and Risk Assessment*.)

### B.8. Responsibility and authority

The extent of the coxswain's responsibility and authority are specified in <u>Coast Guard Regulations</u>, COMDTINST M5000.3 (series). Coxswains shall be responsible, in order of priority, for the following:

- Safety and conduct of passengers and crew
- Safe operation and navigation of the boat
- Completion of the sortie(s) or mission(s)

Coxswains will respond to the following:

- Hazards to life or property
- Violations of law or regulations, except for Auxiliarists
- Discrepancies in aids to navigation

### B.9. Performance, skill, and knowledge requirements

The knowledge requirements and performance skills for coxswains are extensive. Coxswains must apply good judgment, intelligence, and initiative. They must make decisions with the safety of their crew and boat in mind. In addition to basic crew member skills, a coxswain requires these additional knowledge and performance skills:

• Demonstrate leadership that effectively coordinates, directs, and guides the performance of the boat crew during watches and tasks (e.g., towing, fog navigation, and man overboard).



- Demonstrate correct application of regulations, policy, and guidance delineated by the unit commander or higher authority to the circumstances at hand (e.g., safe navigation, safe speed, law enforcement, and rendering assistance).
- Know the boat's limitations:
  - maximum sea conditions boat can operate in,
  - maximum wind conditions boat can operate in, and
  - maximum size of boat that can be towed by your boat (facility).
- Navigate and pilot a boat.
- Know the local OPAREA with minimal reference to charts and publications.
- Demonstrate boat handling skills to safely and prudently control the movement of a boat while underway.
- Understand the principles of risk management and incorporate them into the decision making process. These principles include detection, identification, evaluation, and mitigation or control risk as part of making decisions (e.g., slow to safe speed in restricted visibility, cast off a tow because the assisted vessel is losing stability).



### Surfman

#### **B.10.** General

NOTE &

There is no Surfman boat crew position in the Auxiliary program. The **Surfman** is considered an advanced coxswain qualification. A Surfman is a highly motivated, experienced boat handler capable of operating a Motor Lifeboat (MLB) or Surf Rescue Boat (SRB) in surf. The Surfman also leads, motivates and trains boat crews to operate in these extreme types of conditions.

### B.11. Performance, skill, and knowledge requirements

A surfman must be previously qualified and certified as an MLB Coxswain. There are several knowledge and performance skills required in addition to basic Coxswain skills:

- Thorough understanding of ocean currents, weather, and hydrodynamics. How they pertain to the local bar/inlet conditions.
- Boat handling skills and procedures while operating in surf.
- Boat crew safety and emergency procedures.

### **B.12.** Additional responsibilities

A Surfman is expected to have additional responsibilities at an MLB station that include:

- Boat crew management in high risk, high stress situations.
- Monitor all levels of training. They must train and pass their skills and experience on to new coxswains.
- Make important risk assessment decisions during heavy weather and surf.
- Oversees readiness of equipment and personnel.
- Stand watch during heavy weather and surf conditions.



### Section C. Watchstanding Responsibilities

### **Overview**

### Introduction

Under the direction of the coxswain, crew members are assigned various watches which are described in this section.

### In this section

These items are discussed in this section:

Topic	See Page
Lookout Watch	1-14
Night Lookout Watch	1-21
Helm Watch	1-22
Towing Watch	1-23
Anchor Watch	1-25



### **Lookout Watch**

### C.1. Requirement

The <u>Navigation Rules</u>, <u>International-Inland</u>, COMDTINST M16672.2 (series) states that "Every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision."

### C.2. Assign and station

### NOTE &

Although not specifically assigned the duty of lookout, the entire crew must perform lookout duties unless directed otherwise.

Coxswains must assign and station **lookouts** properly in order to comply with the requirement noted above. Lookouts must report to the coxswain everything seen, smelled, or heard while the boat is underway that may endanger the boat or may indicate a situation to investigate (e.g., distress, law enforcement, or pollution). Some examples are:

- Ships
- Land
- Obstructions
- Lights
- Buoys
- Beacons
- Discolored water
- Reefs
- Fog signals
- Anything that could affect safe navigation

#### NOTE &

It is most important for the coxswain to consider the experience level and abilities of individual crew members when making assignments. In the past, the inappropriate assignment of crew duties has contributed to mishaps resulting in fatalities.

#### C.3. Guidelines

Use the following guidelines to stand a proper **lookout watch**:

- Remain alert and give full attention to your assigned duty.
- Remain at your station until relieved.



- Do not distract yourself or others with excessive conversation. (However, <u>some</u> conversation among crew members may be beneficial in reducing fatigue and maintaining alertness.)
- Speak loudly and distinctly when making a report.
- If you cannot positively identify the object sighted, smelled or heard, report what you think at that moment.
- Repeat your report until it is acknowledged by the coxswain.
- When conditions impair your ability to see, smell, or hear; report the condition so the coxswain can take corrective action.
- Report everything you see including floating material, even if you have to report it several times.
- Make certain you understand your duties. If you do not understand your duties, ask for more information.

### C.4. Lookout positioning

Lookouts must be posted by the coxswain so they have the best possible chance of seeing and hearing an approaching vessel or searching for an object in the water. The coxswain should use the following steps when **positioning lookouts**:

Step	Procedure
1	Choose a boat speed that enables lookouts to effectively and
	safely perform their duties.
2	Position lookouts so they can effectively and safely perform
	their duties under the operating conditions, e.g., restricted
	visibility, boat speed, sea state, weather.
3	During periods of rain, sleet, and snow or when taking spray
	over the bow, select lookout positions that minimize
	impairment of vision.
4	During a search, post two lookouts when able. Lookouts
	should be positioned on each side of the vessel so that each can
	scan a sector from dead ahead to directly aft.
5	Select a stable location that will not place the lookouts in
	danger of being blown or swept overboard.



### C.5. Object identification

Lookouts must report what they see, smell, or hear with as much detail as possible. **Object type** is immediately important (vessel, buoy, breaking waves), but additional details may help the coxswain in decision making. The following are some obvious characteristics of objects:

- Color
- Shape
- Size

At night, lookouts must identify the color of all lights. This is the specific reason why all boat crew members must have normal color vision.

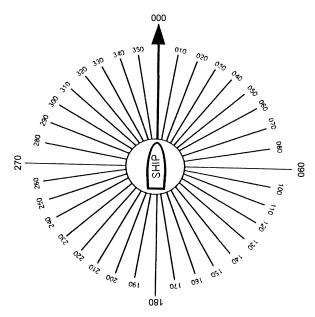
### C.6. Relative bearing

Lookouts make reports using **relative bearings only**. This means that the bearings are measured with reference to the vessel's heading, or to the fore and aft line of the boat's keel. These bearings run clockwise from zero degrees (000°) or dead ahead, through one-eight-zero degrees (180°) or dead astern, around to three-six-zero degrees (360°) or dead ahead again.

The following steps are important in reporting relative bearings:

Step	Procedure	
1	Study the diagram on major reference points of relative	
	bearings. Picture in your mind the complete circle of relative	
	bearings around your boat in 10 degree increments (See Figure	
	1-1).	





Relative Bearings Figure 1-1

Bearings are always reported in three digits and distinctly spoken digit by digit. To ensure one number is not mistaken for another, the following pronunciation is required.

Numeral Spoken as	Numeral Spoken as
0ZERO	5FI-YIV
1 WUN	6SIX
2TOO	7 SEVEN
3THUH-REE	8ATE
4 FO-WER	9NINER

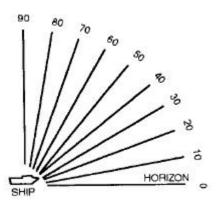
3	The following are examples of how to report bearings:	
	Bearing Reported as	
	000°ZERO ZERO ZERO	
	010°ZERO WUN ZERO	
	045°ZERO FO-WER FI-YIV	
	090°ZERO NINER ZERO	
	135°WUN THUH-REE FI-YIV	
	180°WUN ATE ZERO	



225°TOO TOO FI-YIV
260°TOO SIX ZERO
270°TOO SEVEN ZERO
315°THUH-REE ONE FI-YIV

### C.7. Position angle

Objects in the sky are located by their relative bearing **and position angle**. The position angle of an aircraft is its height in degrees above the horizon as seen from the boat. The horizon is 0° and directly overhead is 90°. The position angle can never be more than 90°. Position angles are reported in one or two digits and the word "Position Angle" is always spoken before the numerals (See Figure 1-2).



Position Angles Figure 1-2

#### C.8. Distance

Report **distances** in yards. Knowing the distance to the horizon, land, or other reference point, will help estimate distance. By dividing the distance from you to your reference point, you can estimate the distance to another object. Ranges in yards are reported digit by digit, except when reporting yards in hundreds or thousands which are spoken as listed below.

Number of Yards	Spoken as
50	FI-YIV ZERO
500	FI-YIV HUNDRED
5000	FI-YIV THOUSAND



### C.9. Making reports

When making reports, the lookout names or describes the object sighted, the direction (in relative degrees) and the range to the object (in yards). Give reports in the following format:

- Object name or description
- Bearing
- Range

### For example:

Discolored water on a bearing of 340° relative to the bow of the boat and at a distance of 2,000 yards.

REPORTED AS: "Discolored water Bearing THUH-REE FO-WER ZERO, Range TOO THOUSAND".

An aircraft bearing 280° relative to the bow of the ship, 30° above the horizon, and at a distance of 9,000 yards.

REPORTED AS: "Aircraft TOO ATE ZERO, Position Angle THUH-REE ZERO, Range NINER THOUSAND".

### C.10. Scanning

The lookout's method of eye search is called **scanning**. Scanning is a step-by-step method of visually searching for objects. Good scanning techniques will ensure that objects are not missed. Scanning also reduces eye fatigue. Development of a systematic scanning technique is important. There are two common scanning methods:

- Left to right and back again
- Top to bottom and bottom to top

In either case, move your eyes in increments. This creates overlaps in your field of vision and fewer objects will be missed.

Step	Procedure
1	When looking for an object, scan the sky, sea, and horizon
	slowly and regularly. Scan from left to right and back again
	or from top to bottom and bottom to top.



### NOTE &

For more details on scanning, refer to the Search Operations Chapter of the National Search and Rescue Manual, COMDTINST M16120.5 (series).

2	When scanning, do not look directly at the horizon; look above it. Move your head from side to side and keep your eyes fixed. This will give any stationary objects in your field of vision the appearance of moving and make them easier to see.  One technique is to scan in small steps of about 10 degrees and have them slightly overlap as you move across your field of view.
3	Fatigue, boredom, and environmental conditions affect scanning. For example, after prolonged scanning, with little or no contrast, your eyes develop a tendency to focus short of where you think you are looking. To prevent this, periodically focus on a close object such as whitecaps or the bow of the boat.

C.10.a. Night scanning

When binoculars are used for night scanning, hold them straight forward and shift your line of sight in a circular path around the inside of the binocular field. When you think you see an object, look all around it, not at it. The chances are it will appear in dim outline. Using binoculars at night on a stable platform increases your range of vision significantly, however, objects will not appear in clear detail.

C.10.b. Fog scanning

Fog lookouts scan slowly and rely on their ears. The best position for a fog lookout is where sight and hearing is not interfered by radios, conversation, or other distractions. Usually at the bow is best, if conditions allow.



### **Night Lookout Watch**

#### C.11. General

Although the duties for day and **night lookout** watches are the same, safety and caution during night watches are especially important. Your eyes respond much more slowly at night and pick up moving objects more readily than fixed objects. It takes about 30 minutes for your eyes to become accustomed to the limited light available at night.

#### C.12. Guidelines

The guidelines for lookout watches also apply for night lookout watches.

NOTE &

Night vision is based on your eyes receiving and interpreting a different type of light than exists during daylight.

### C.13. Dark adaptation

**Dark adaptation** is the improvement of vision in dim light. It is very difficult to see colors at night. Most objects are seen in various shades of gray. Although dark adaptation requires at least 30 minutes, a bright light will destroy night vision in a fraction of a second. In this brief period, the eyes readjust themselves to daylight conditions and the process of dark adaptation must begin all over again.

### NOTE &

Avoid looking at bright lights during night-time operations. When a light must be used, use a red light.

### C.14. Scanning

Scan the sky, sea, and horizon slowly and regularly when looking for an object. Scan from left to right and back again or from top to bottom and from bottom to top.



### **Helm Watch**

#### C.15. General

The **helm watch** or helmsman is responsible for the following:

- Safely steering the boat
- Maintaining a course
- Carrying out all helm commands given by the coxswain

The helm watch can be carried out by the coxswain or by any designated crew member. Every crewman should learn to steer and control the boat. They must learn to use both the primary steering system and, when appropriate, the emergency steering system, to ensure safe operations of the boat under normal and abnormal conditions.

#### C.16. Guidelines

When a boat uses a helmsman, there are several guidelines for the helm watch:

- Check with the coxswain for any special instructions and for the course you will steer.
- Repeat all commands given by the coxswain.
- Execute all commands given by the coxswain.
- Maintain a given course within 5°.
- Remain at the helm until properly relieved.
- Execute maneuvers only when expressly ordered, however, minor changes in heading to avoid debris, which could damage propeller or rudders, are essential.
- Operate the emergency tiller (if equipped) during loss of steering.
- Properly inform relief of all pertinent information.



### **Towing Watch**

#### C.17. General

A towing watch is normally performed aft on the boat. The primary duty of the towing watch is to keep the towline and the boat being towed under constant observation. (For more information on towing procedures, see Chapter 17 - *Towing*.)

#### C.18. Guidelines

The guidelines for standing this watch are as follows:

- Observe how the tow is riding, e.g., in step, listing, or veering.
- Report any unusual conditions to the coxswain.
- Ensure chafing gear is riding in place.
- Adjust the scope of the towline upon command of the coxswain.
- Report any equipment failure or problems observed to the coxswain immediately.
- Keep deck space area clear of unnecessary gear and people.
- Stay clear of the immediate area around the towline due to possible line snap back.
- Know when and how to do an emergency breakaway.

### C.19. Observed danger

The towing watch must be aware of and report any signs of danger. Many of the signs of danger include:

- Yawing disabled boat veers from one side to the other which may cause one or both boats to capsize.
- List increasing on towed boat.
- In Step the proper distance between the towed boat and the towing boat to maintain control and prevent breaking the tow line.
- Towed boat taking on water.
- Deck hardware failure due to stress, no backing plates, etc.
- Towline about to part due to stress, chafing, or other damage.
- Towed boat overtaking your boat due to sudden reduction in speed.
- Positioning of towed boat's crew.



### C.20. Maintaining watch

Maintain a tow watch until the disabled boat is moored or until relieved. When relieved, make sure that all important information is passed to the relief (i.e., problems with chafing gear, towed boat yaws, etc.).



### **Anchor Watch**

#### C.21. General

When the boat is anchored, an **anchor watch** is set. The person on watch must ensure that the anchor line does not chafe and that the anchor does not drag. The individual on watch also looks for other vessels in the area. Even when the boat is anchored, there is the possibility that it can be hit by another boat.

### C.22. Guidelines

Use the following guidelines when standing anchor watch:

- Check the strain on the anchor line frequently.
- Check that the anchor line is not chafing.
- Confirm the position of the boat at least every 15 minutes, or at shorter intervals as directed by the coxswain.
- Report bearing or range (distance) changes to the coxswain immediately.
- Report approaching vessels to the coxswain immediately.
- Report major changes in wind velocity or direction.
- Check for current or tidal changes.
- Report any unusual conditions.

### C.23. Check for chafing

Once the anchor is set, apply **chafing** gear to the anchor line. It is the job of the anchor watch to ensure chafing gear stays in place and the anchor line does not chafe through.

### C.24. Check for dragging

There are two methods to determine if your anchor is **dragging**.

- Check for tension on the anchor line
- Check the boat's position

If the anchor is dragging over the bottom, you can sometimes feel vibration in the line. Periodically check your position by taking a navigational fix. <u>Always use both methods</u>.



### C.25. Check your position

It is important to routinely **check your position** to ensure you are not drifting or dragging anchor:

- Take compass bearings to three separate objects spread at least 45° apart. Any bearing changes may indicate that you are beginning to drift.
- On a boat equipped with radar, determine the distance (range) to three points of land on your radar screen. Any change in the ranges may indicate anchor drag.
- On a Loran or GPS equipped boat, mark your position with your equipment. Periodically check your LAT/LONG readout. Any change would show your position is changing.
- Make a note of each time you check your bearings or ranges.
   Also note your position and the depth of water regularly. A small note pad is acceptable for this purpose. If the water depth or position changes, the anchor may be dragging.

As the wind or water current changes direction, your boat will swing about its anchor. This is a **swing circle** centered around the position of the anchor, with a radius equal to the boat's length plus the horizontal component of the length of anchor line in use; simply stated **horizontal component** + **boat length** = **radius of swing circle at its greatest length**. (The horizontal component decreases as the water depth increases.) Ensure your swing circle is clear of other vessels and underwater obstructions. When checking your position, it should fall inside the swing circle.





## Appendix 1-A Pre-Underway Checklist

1.	Brief all crew members on the mission, preferably before getting underway, or as soon as possible afterwards. The briefing should be complete. State:	
	a.	Purpose of mission
	b.	Special circumstances
	c.	Working radio frequency for the mission
	d.	Plan of action upon arrival at destination
	e.	Speed and course to be steered to destination
	f.	Weather and sea conditions
2.	<ul> <li>2. Ensure that all doors and hatches are secured. (Watertight integrity)  Note: In an enclosed pilot house, at least one door or window to the weather decks should normally be opened to facilitate hearing sound signals from approaching vessels and aids to navigation.</li> <li>3. Ensure that all loose gear is safely tied down or stowed.</li> <li>4. Ensure that all gear necessary to perform the mission is on board. This includes any supplemental equipment not normally on the boat but needed for the specific mission.</li> </ul>	
3.		
4.		



5.	the environment with PFDs). Comwhen underway.	nbers wear personal protective equipment required for (e.g., PFDs, helmets, anti-exposure coveralls, or dry suits amandant policy requires PFDs to be worn at all times On Coast Guard boats, the crew is also required to wear nal kit at all times.
6.	The boat engineer must check the boat's mechanical and electrical systems and make reports to the coxswain concerning the status and readiness of all the following:	
	a.	Fuel levels
	b.	Oil levels for engines and marine (reduction) gears
	c.	Cooling water level
	d.	Hydraulic steering oil
	e.	Engine/marine (reduction) gear psi/temperature gauges
	f.	Electrical systems energized
	g.	Navigational lights (e.g., night, reduced visibility)
	h.	Open sea suction
	i.	Shore tie disconnected
	j.	Overboard discharge
7.	Test the boat's elecoxswain:	ectronic equipment and report the status to the
	a.	Radios
	b.	Depth sounder
	c.	Radar
	d.	All navigational systems
	e.	Chart and compass light
8.	Test the engine c reaction time in e	ontrols, both FORWARD and REVERSE. Note the ach direction.



9.	Cast off all lines, stow the lines, and bring on board any fenders.
10.	Notify the unit of the time underway and number of crew members on board. Also report any personnel or boat discrepancies at this time.







## Appendix 1-B Normal Cruising Checklist (Coxswain)

1.	Always KEEP A conditions.	LERT and position lookouts appropriately for current	
	Collisions at Sea other vessels, aid	uired by the International Regulations for Preventing (COLREGS). Under all circumstances, keep alert for s to navigation, and hazards including: breakers, rocks, ads", and fishing nets.	
2.	When proceeding normally with good visibility and your boat is NOT engaged in an active search, keep your crew in a protected location. Designate crew members to act as a lookout.		
3.	Always know the	e whereabouts of your crew.	
4.	Observe aids to n	navigation for all of the following:	
	a.	Position	
	b.	Condition	
	c.	Operation	
5.	Conduct drills an	d training frequently, including all of the following:	
	a.	Boat handling	
	b.	Anchoring	
	c.	Navigation Rules (Inland & International)	
	d.	Navigation	
	e.	Man overboard	



	f	•	Emergency steering
	g	ξ.	Search patterns
	h	1.	Firefighting on board
	i.	•	Helicopter operations (if helicopter is available)
6.			ve the depth finder and compare the water depth nown on the chart for your location.
7.	Always be on the alert for vessels or people that may be in distress.		
8.	Make OPS (operations and position) reports to the parent unit as required by local directives and procedures.		
9.	When you are operating in any conditions where your visibility is reduced for any reason, <b>EXTRA PRECAUTIONS MUST BE TAKEN</b> :		
	a	1.	Position lookouts appropriately and explain their duties.
	b	).	Keep alert for all vessels and sound signals.
	Note:		
	The aft lookout should be alert for overtaking vessels and for signals missed by the forward lookout.		
	c	2.	Watch for aids to navigation which do not have audible sound devices.
	d	1.	Lay out charts with the main course, time, and speed plotted on them.
	e	<b>.</b>	Begin plotting navigational fixes, record times, and positions regularly.
	f	•	Sound appropriate signals.
	g	ζ.	Display appropriate navigational lights.
	h	1.	Maintain a speed that will enable you to take proper action to avoid a collision and stop within a distance appropriate to the prevailing circumstances and conditions (that is, do not go too fast).





## Appendix 1-C Auxiliary Pre-Underway Checklist

### Overview

Prior to getting underway conduct a pre-underway check-off of your facility. Check for proper condition, operation, and stowage of required equipment. Routine mechanical, electrical, and engine checks must also be done. Ensure all crew members are aware of emergency procedures, and the location and use of emergency equipment. Inform the Operational Commander of the number of persons onboard and their names prior to getting underway. Prepare a pre-underway check-off sheet for your specific facility. Below is a sample pre-underway checklist.





		<b>Date</b> :	
	Facility Name:		
	Facility Number	<b>:</b>	
1.	Verified appropri	ate Coast Guard patrol orders have been issued.	
2.	Located and checked the proper condition, operation, and stowage of the following equipment:		
	a.	Personal floatation devices (PFDs)	
	b.	Fire extinguishers	
	c.	Visual distress signals	
	d.	Anchors and anchor lines	
	e.	Dewatering device	
	f.	Watch or clock	
	g.	Boarding ladder (or other means of boarding)	
	h.	Kicker skiff hook (if required)	
	i.	Binoculars	
	<b>j</b> .	Blanket	
	k.	Fenders	
	l.	Towline	
	m.	Bridle	
	n.	Heaving lines	
	0.	Mooring lines	
	p.	Searchlight	
	q.	Spare navigation lightbulbs	
	r.	Boat hook	
	S.	Navigation lights	



	t.	Lead line or sounding pole
	u.	Charts, navigation plotting instruments
	v.	Tools and spare parts
	w.	First aid kit
	X.	Sound producing device
	у.	Current Rules of the Road publication on board, if applicable.
3.	Completed the rebelow.	equired mechanical, electrical, and engine checks listed
	a.	Oil level (if applicable)
	b.	Water level (if applicable)
	c.	Reduction gear oil level (if applicable)
	d.	Fuel system, especially fuel shut-off valves
	e.	Ventilation system (if applicable)
4.	Conducted crew	briefing:
	a.	Purpose of mission
	b.	Any special circumstances concerning the mission
	c.	Working radio frequency to be used for the mission
	d.	Expected weather and sea conditions
	e.	Crew members in proper uniform and proper equipment
	f.	Inform Operational Commander of the number and names of persons onboard
	g.	Confirm the mission is within the facility's operational standard.
5.	Secured all openi	ings.
6.	Secured boat for	sea (no loose gear).
·		······································



7.	Displayed proper flags and signboards.		
8.	Opened sea suction.		
9.	Ventilated the engine compartment before starting engine/s.		
10.	Started the engine/s.		
	a.	Energized the electrical and electronic systems (bilge pump, etc.)	
	b.	Engine/marine gear pressures and temperatures satisfactory (if equipped)	
11.	Disconnected sho	ore line.	
12.	Tested the following electronic equipment (if equipped).		
	a.	VHF - FM radio	
	b.	Loud hailer	
	c.	Depth finder	
	d.	Loran C	
	e.	Radar	
	f.	GPS	
13.	•	ntrols in forward and reverse with lines still attached to he reaction times for both directions.	

